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PENSOFT

Tachyporus nitidulus (Fabricius, 1781) (Coleoptera, Staphylinidae, Tachyporinae): first record from the state of Florida, USA

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Abstract
The range of the staphylinid beetle *Tachyporus nitidulus* (Fabricius, 1781) (Coleoptera, Staphylinidae, Tachyporinae) is extended to include the state of Florida, USA. The record is based on a single female specimen collected via Malaise trap in a rural yard in Baker County, Florida in 2007.

Key words
Range extension; distribution; adventive; rove beetle.

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Introduction

The genus *Tachyporus* (Staphylinidae: Tachyporinae) was erected by Gravenhorst in 1802. Campbell (1979) subsequently revised the *Tachyporus* of North and Central America, including comprehensive distribution summaries. One of the widest distributed species, *Tachyporus nitidulus* (Fabricius, 1781), was recorded in much of the United States and Canada, with a single specimen tentatively recorded from Mexico.

Originally described from Sweden, *T. nitidulus* is native throughout the Palearctic. This predatory species is considered adventive to the Nearctic (Majka and Klimaszewski 2008), where it was first recorded from Indiana, USA by Say (1834). Despite its now extensive distribution, *T. nitidulus* has never been recorded from the state of Florida, USA (Campbell 1979; Peck and Thomas 1998). Here, we present the first record of the species in the state of Florida based on a single adult female from Glen Saint Mary, Baker County, Florida, USA.

Methods

The specimen was collected from a Malaise trap in a rural yard composed of mixed woods at location 30.3° N, 082.1653° W (datum WGS84) on 17 May 2007 (Fig. 1). The specimen is deposited at the University of Central Florida Collection of Arthropods (UCFC) under accession number UCFC 0 387 807. Additional collection information can be found at stable link: http://osuc.biosci.ohio-state.edu/UCFC/spmInfo.html?id=UCFC%200%20387%20807.

Results

New record. United States, Florida, Baker County, Glen Saint Mary, (30.3000° N, 082.1653° W), Zoll, E. and Fullerton, S. M., 17 May 2007, UCFC 0 387 807, 1.

Identification. Identification was performed according to Campbell (1979) and confirmed by Dr J. Howard Frank

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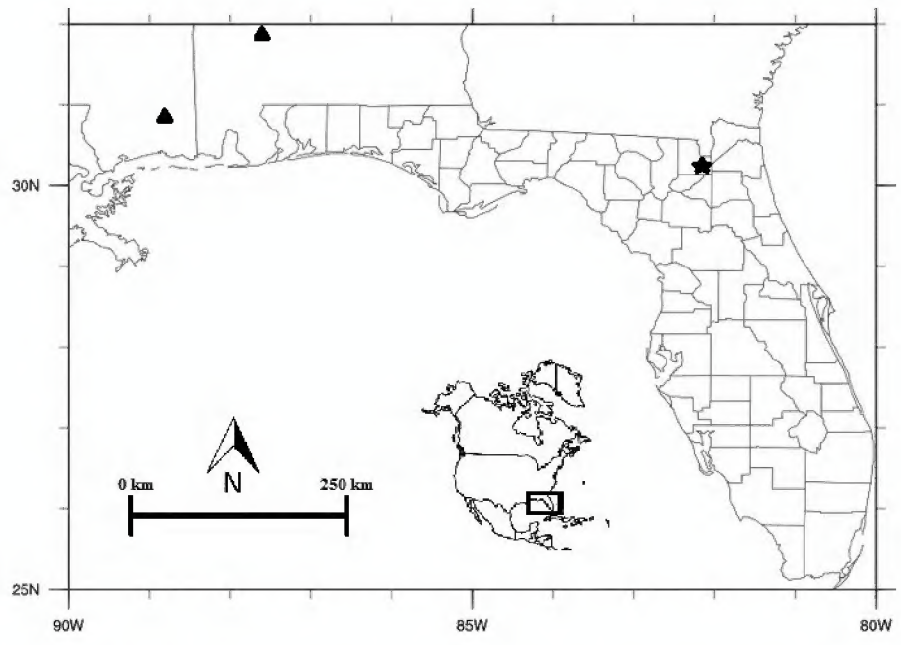

Figure 1. Map displaying Florida record of *Tachyporus nitidulus* (Fabricius, 1781) (star). Triangles represent nearest previous records of the species.

of the University of Florida Department of Entomology and Nematology. *Tachyporus nitidulus* is identified by the following set of characters: length 1.1–1.4 mm from apex of head to apex of elytra; color light yellowish to dark reddish-brown, darker in some specimens; head in some specimens darker than pronotum and elytra; 7th abdominal tergite with apical fringe of pubescence; pubescence of elytra and abdomen fine and dense; and pronotum glabrous and glossy and wider than elytra (Fig. 2).

The species can be readily distinguished from its only southeastern USA sympatric congener *T. jocosus* (Say, 1834) by its maxillary palps (Fig. 3). The apical segment of the maxillary palps of *T. nitidulus* is triangular and no longer than the width of the preceding segment, versus the apical segment of maxillary palps being subulate and distinctly longer than the width of the penultimate segment in *T. jocosus*.

Discussion

This is the first record of *T. nitidulus* from the state of Florida, USA. The new record is approximately 500 km from the nearest previous record (Fig. 1) (Campbell 1979). The typical habitat of *T. nitidulus* is moist areas like leaf litter or decaying wood (Campbell 1979), and the presence of the specimen reported here in a rural yard is congruent with 1 previous study noting the species in suburban lawns in Kentucky, USA (Cockfield and Potter 1984). Given that the species has been recorded from Mississippi, Arkansas, Alabama, North Carolina, and now Florida, it is likely also present in Tennessee, South Carolina, and Georgia. With future sampling efforts, *T. nitidulus* is expected to be found in these 3 states from which it has also not yet been recorded (Campbell 1979). The present record provides additional evidence of the success of this widely distributed adventive species.

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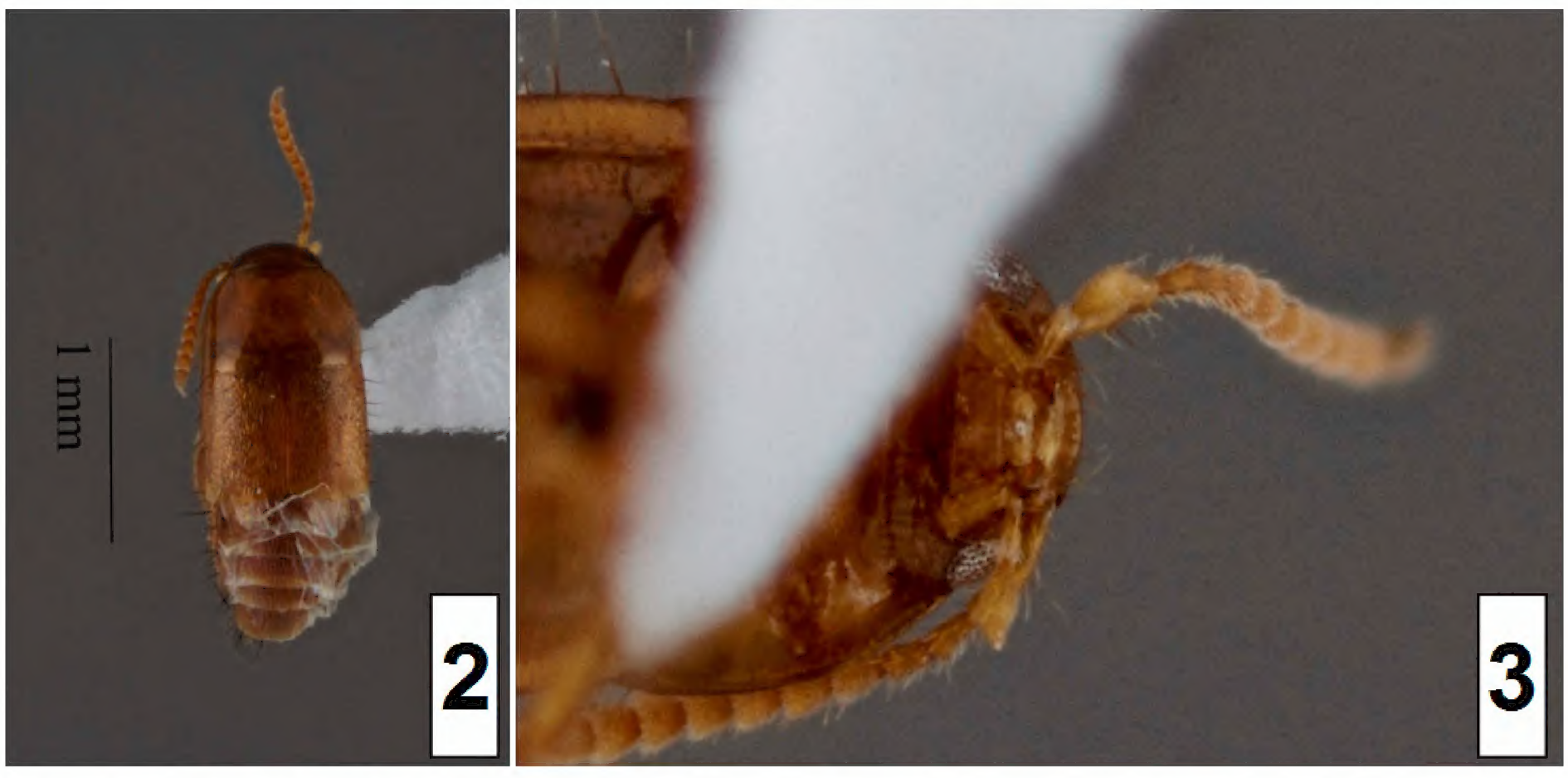
Authors' Contributions

ABO performed the literature review, created the map, and wrote the manuscript; SLK identified and photographed the specimen, and edited the text.



Figures 2, 3. Images of the female specimen of *Tachyporus nitidulus* (UCFC 0 387 807) from Florida: **2.** Dorsal view **3.** Maxillary palp. Scale bar = 1 mm.

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